

ABSTRACT OF THE DISCLOSURE

An apparatus and method for a burner is disclosed. In an embodiment of an apparatus of the present invention, the burner includes a combustion gas tube with a first gas inlet line coupled to the combustion gas tube and an oxygen-containing gas tube with a second gas inlet line coupled to the oxygen-containing gas tube. A swirl chamber is disposed between either the first gas inlet line and the combustion gas tube or between the second gas inlet line and the oxygen-containing gas tube. In accordance with an embodiment of a method of the present invention, the method includes controlling a flow of a combustion gas to the combustion gas tube and controlling a flow of an oxygen-containing gas to the oxygen-containing gas tube. The combustion gas or the oxygen-containing gas is swirled in a swirl chamber and the combustion gas and the oxygen-containing gas is supplied to a burner.